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CLAIMS

We claim:

- 1. A target assembly comprising a rotatable target tube and a central body characterised in that said assembly further comprises inside said tube at least one of the following

 a bearing system for rotatably supporting said tube by said body a drive means for rotating said tube relative to said body an electrical contact between said body and said tube at least one rotatable coolant seal for supplying or extracting
- coolant to said tube through said body

 at least one rotatable vacuum seal for enabling a vacuum outside
 said tube
 - 2. The target assembly according claim 1 wherein said drive means is an electrical rotary motor.
 - 3. The target assembly according claim 2 wherein said electrical rotary motor is a fixed axis, rotating drum motor.
 - 4. The target assembly according claim 1 wherein said drive means is a hydraulic rotary motor
- The target assembly according claim 4 wherein said hydraulic rotary motor is driven by the coolant.
 - 6. A sputtering apparatus positioned within walls of an evacuable chamber comprising a target assembly as in any one of claim 1 to 5, said apparatus further comprising a first and a second coupling means connected to said chamber walls for removably coupling said body to said first and second coupling means.
 - 7. A sputtering apparatus positioned within walls of an evacuable chamber comprising a target assembly as in any one of claim 1 to 5, said apparatus further comprising one coupling means connected to said walls for removably coupling said body to said one coupling means.
 - 8. A target assembly comprising a rotatable target tube and a first and a second central body characterised in that

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said assembly further comprises inside said tube at least one of the following

- a bearing system for rotatably supporting said tube by said first or said second body
- a drive means for rotating said tube relative to said first or second body
 - an electrical contact between said body and said tube for electrically connecting said tube through said first or second body at least one rotatable coolant seal for supplying or extracting coolant to said tube through said first or second body at least one rotatable vacuum seal for enabling a vacuum outside said tube
- The target assembly as in claim 8 wherein said first and second body are coupled to one another.
- 10. A sputtering apparatus positioned within walls of an evacuable chamber and a target assembly as in claim 8 or 9 said apparatus further comprising a first and a second coupling means connected to said chamber walls for removably coupling said first and second body to said first and second coupling means.
- 20 11. A sputtering apparatus positioned within walls of an evacuable chamber and a target assembly as in claim 8 or 9, said apparatus further comprising one coupling means connected to said chamber walls for removably coupling said first body to said one coupling means.